Background and aims: Graves diseases are hyperthyroidism cause by immunological factor. Thyroid antibody at Graves disease activate thyrotropin receptor to make increase of thyroid hormone production. Treatment with prophyliptourasil can decrease the level of thyroid hormon but level of IL-4 are still higher more than normal. Aim of the study to know polymorphism promoter gene of IL-4 and correlation with IL-4 level at Graves disease patients.

Methods: Study done from 35 Graves disease patients. Blood vena sample take for DNA isolation, thyroid antibody and IL-4 level. Polymorphism promoter gene IL-4 with PCR-RFLP using restriction enzyme and electrophoresis by agarose gel 1.5%. Polymorphism promoter gene IL-4 continued with PCR sequencing. Thyroid antibody and IL-4 level was measure by ELISA.

Results: Analysis from 35 patients with Graves disease found IL-4 level are 22.77±9.43 pg/ml(normal <1.3 pg/ml). Polymorphism promoter gene IL-4 was found at T-589C and T-34C position. Polymorphism promoter gene IL-4 at T-589C was found at 28(80%) sample. Polymorphism promoter gene IL-4 at T-34C was found at 27 (77.1%) sample. This study found relation of polymorphism promoter gene IL-4 with high level of IL-4.

Conclusions: IL-4 level are higher at Graves disease patients. Polymorphism promoter gene IL-4 found at T-589C position (80%) and T-34C position (77%). Suggestion polymorphism promoter gene IL-4 have relation with high level IL-4 at Graves disease patients.

Background and Aims:
Aim: Pulmonary arterial hypertension (PAH) is an increasingly recognised complication of systemic lupus erythematosus, but may remain underdiagnosed if asymptomatic.

The purpose of this study is to assess correlation of six minute walk test (6WMT) and serum pro-BNP levels with echocardiographic findings of pulmonary arterial hypertension in patients with systemic lupus erythematosus.

Methods: This is a prospective cross sectional study of 50 SLE patients using resting transthoracic echocardiography to estimate the systolic pulmonary artery pressure (sPAP).

Results: Five out of 50 patients were diagnosed to have PAH with sPAP >30 mm Hg (range 31–40 mmHg) based on echocardiography. Spirometric parameters also did not show any difference between the two groups (p>0.05), but the difference in total distance walked in six minute and serum proBNP level between SLE patients with and without PAH was considered significant (p<0.05). A high correlation was found between pulmonary artery pressure and serum proBNP level but not between pulmonary artery pressure and the six minute walked distance in SLE patients.

Conclusion: The point prevalence of PAH in SLE patients was 10% in our study and the significant correlation between pulmonary artery pressure and serum proBNP level suggests that it can be used as a valuable marker for early diagnosis of asymptomatic pulmonary hypertension in patients with systemic lupus erythematosus.